Abstract of the Disclosure

A method and apparatus render a region of a distance field representing an object. The distance field is partitioned into a set of cells, where each cell includes a set of distance samples and a method for reconstructing the distance field within the cell using the distance samples. A set of source cells is selected from the set of cells of the distance field to enable the rendering of the region. Each source cell is represented as a geometric element in a world coordinate system. Each geometric element is associated with a texture map, where the texture map includes distance samples of the corresponding source cell of the geometric element. Each geometric element is transformed from the world coordinate system to a pixel coordinate system and texture mapped, using the distance samples, to determine a distance for each component of each pixel associated with the geometric element. The distance of each component of each pixel is mapped to an antialiased intensity of the component of the pixel.